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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/531,537

04/15/2005

John Bergman

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36528

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07/23/2008

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EXAMINER

QIAN, YUN

ART UNIT

PAPER NUMBER

4162

MAIL DATE

DELIVERY MODE

07/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/531,537	Applicant(s) BERGMAN, JOHN	
	Examiner YUN QIAN	Art Unit 4162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/20/2007 and 4/15/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 24-29, 34-38, 41 and 47-48 are rejected under 35 U.S.C.102 (e) as being anticipated by Freitag et al. (US 6,485,692).

Regarding claims 24-28, 35-38, and 41, Freitag et al. discloses a method and apparatus for performing parallel chemical reactions under pressure in a plurality of reactor vessels. Reagents are transferred via pumps or plungers and mixed in the reactor vessels, wherein certain reaction conditions are controlled including temperature, pressure, rate of addition of reagents, mixing and isolation of product. The “reactor vessels” in the reference is considered an equivalent to the “mixing zone” of instantly claimed, in which not only perform a positive pressure for charging reagents and for high pressure reactions (from atmospheric pressure to about 1000 psi, which is equivalent to about 100-6900 KPa), one can also apply a negative pressure for transferring reagents, isolation products and deaeration for such air and moisture sensitive reactions (col.2, lines 10-40, col. 3, lines 8-9, col. 5, lines 1-8, and col.7 lines 8-15).

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Regarding claims 29, 34, and 47-48, Freitag et al. discloses a method and apparatus of using thermistor for both temperatures monitoring and controlling (col. 19, 21-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30-33, 39-40, and 42-46, are rejected under 35 U.S.C.103 (a) as being unpatentable over Freitag et al. (US 6,485,692) in view of Sakai et al (4,987,852) in further view of Roitto et al. (EP 0916765)

Regarding claim 30-32, 39-40, and 42, Freitag '692 teaches applying a negative pressure to remove air for the air and moisture sensitive reactions (col.7, lines 9-14 and col. 2, lines 41-42). However, Freitag does not specifically teach using a pressure screen for deaeration at pressure 0.5-50 KPa. Sakai '852 teaches to remove air bubbles in paint via a vacuum pump at a preferred pressure about 10-50 Torr (about 1.33-6.7 KPa). However, it is also depends on conditions such as the viscosity of paint to be used (col. 5, lines 6-10). In addition, Roitto '765 discloses transferring the coating mixture under pressure through a pressure screen for separating foreign materials. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to remove air from the coating mixture of Sakai and Roitto to the method and

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apparatus processes taught by Freitag, because Sakai and Roitto teach a known method for preventing pin hole formation in the coating layer and have a reasonable expectation of success. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claims 33, and 43-45, Roitto '765 teaches a method of filtering the coating materials through a filter cloth, and then transfer the resulting coating material to a coating station (claim 1). The mesh size of filter cloth is 100-200 μm ([0014]), partially overlaps with the instant claim 44 (65-300 μm). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to select an optimal size of filter cloth, including the size of the instantly claimed, based on the viscosity of paint and product's quality and quality.

Regarding claims 46, Freitag '692 discloses a method and apparatus for performing parallel chemical reactions under pressure in a plurality of reactor vessels. Desired amount reagents are transferred via pumps or plungers to the reactor vessels (col.2, lines 43-67).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUN QIAN whose telephone number is (571)270-5834. The examiner can normally be reached on Monday-Thursday, 10:00am -4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Yun Qian

/Jennifer McNeil/

Supervisory Patent Examiner, Art Unit 4162